



December 7, 2012

President Barack Obama  
The White House  
United States of America

The Honorable Harry Reid  
Senate Majority Leader  
United States Senate

The Honorable Mitch McConnell  
Senate Minority Leader  
United States Senate

The Honorable John Boehner  
Speaker of the House  
U.S. House of Representatives

The Honorable Nancy Pelosi  
Minority Leader  
U.S. House of Representatives

To the President and Leadership of the U.S. Congress:

As representatives of the major U.S. science, engineering, and higher education organizations, we write to you today on behalf of the hundreds of thousands of researchers and innovators that we represent to ask both branches of government to work together to achieve a bipartisan compromise that avoids the fiscal cliff and moves the country on to sound fiscal footing without sacrificing our nation's crucial investments in science and technology. It is important to recognize that federal research and development (R&D) investments are *not* driving our national deficits. These investments account for less than one-fifth of the current discretionary budget, but discretionary spending is the only place where deep cuts will be made. Placing a significant burden on these crucial areas, as sequestration would do, is nothing less than a threat to national competitiveness. We recognize that the United States faces severe fiscal challenges, and we urge you to begin to address them through a balanced approach that includes tax and entitlement reform.

Economists know that more than half of all economic growth in the industrialized world since World War II has been driven by innovation and technological progress. Public research funding has helped plant the seeds that have spawned the Global Positioning System, the laser, Google, and countless other beneficial technologies in addition to medical advances that have helped save the lives of millions of heart disease, cancer and diabetes patients among others.

The United States today remains a world leader in science, technology and innovation. But certain long-term trends should give us pause. A common measure for comparing international competitiveness is research intensity, or research investment as a percentage of GDP. In recent years, countries such as South Korea, Taiwan, and China, along with select European economies like Germany and Finland, have all increased their research intensities substantially and at a far faster pace than the United States. The nation's long-term leadership position in science, technology and innovation is now threatened and allowing blunt cuts to R&D to go forward will only accelerate these trends.

Almost every national priority—from health and defense, agriculture and conservation, to hazards and natural disasters—relies on science and engineering. Sequestration threatens all these priorities, by requiring up to \$12 billion in R&D funding cuts annually across defense and nondefense programs over the next decade. The need for a technologically superior military remains clear in a dangerous world, but DARPA would lose over \$1 billion for cutting-edge innovation in the next five years alone. Over the same time period, NIH would lose \$11.3 billion for research on some of the nation's most critical medical challenges including those related to cancer, obesity, aging, and emerging diseases. The Department of Energy would lose \$4.6 billion through 2017 for next-generation energy research and nonproliferation R&D. The National Science Foundation would lose \$2.1 billion over five years for research across a broad spectrum of disciplines, most of which is cutting-edge research conducted at universities throughout our nation.

What is needed is a balanced approach to deficit reduction that does not simply take an axe to discretionary federal programs without also considering the contributions of tax revenue solutions and entitlement reform in addressing the federal deficit. There have been many bipartisan commission proposals that have recommended such strategies, and we urge you to come together on just such a balanced solution. Federal nondefense R&D funding has already declined by 5% in the past two years, after remaining flat for the past decade, and continued cuts significantly threaten U.S. leadership in these areas. Our message is that a balanced plan must be one of shared contributions to a sound fiscal future, including strong support for our nation's science and technology enterprise.

We collectively and individually stand ready to help in any way we can as you tackle these vital issues.

Sincerely,

AIMBE

American Association for the Advancement of Science

American Association of Petroleum Geologists (AAPG)

American Astronomical Society

American Chemical Society

American College of Sports Medicine

American Educational Research Association

American Geophysical Union

American Geosciences Institute

American Institute of Biological Sciences

American Mathematical Society

American Peptide Society

American Society for Microbiology

American Society of Agronomy

American Society for Pharmacology & Experimental Therapeutics

American Society of Plant Biologists

American Sociological Association

American Statistical Association

Analog Devices, Inc.

American Society of Civil Engineers

ASME  
Association of American Geographers  
Association of American Universities  
Association for Behavior Analysis International (ABAI)  
Association of Environmental & Engineering Geologists (AEG)  
Association of Population Centers  
Association for Psychological Science  
Association of Public and Land-grant Universities (APLU)  
Association of Research Libraries  
Association for the Sciences of Limnology and Oceanography (ASLO)  
Association of Universities for Research in Astronomy  
Association for Women in Mathematics  
Association for Women in Science (AWIS)  
BASIC- Bay Area Science and Innovation Consortium  
Behavior Genetics Association  
Biophysical Society  
Clemson University  
Coalition for Academic Scientific Computation (CASC)  
Computing Research Association  
Consortium of Social Science Associations (COSSA)  
Consortium of Universities for the Advancement of Hydrologic Science, Inc.  
Council of Energy Research and Education Leaders (CEREL)  
Council of Environmental Deans and Directors (CEDD)  
Council on Undergraduate Research  
Crop Science Society of America  
Duke University  
Ecological Society of America  
Engineering Deans Council of the American Society for Engineering Education  
Environmental Mutagen Society (EMS)  
Federation of Associations in Behavioral & Brain Sciences (FABBS)  
Federation of Materials Sciences  
Florida State University  
Freescale Semiconductor  
Fusion Power Associates  
Genetics Society of America (GSA)  
Geological Society of America  
Georgia Institute of Technology  
IBM Research  
Human Factors and Ergonomics Society  
IEEE-USA  
Indiana University  
International Society for Developmental Psychobiology  
Materials Research Society  
Mathematical Association of America  
Massachusetts Institute of Technology  
MRIGlobal  
Museum of Science, Boston  
National Academy of Neuropsychology

National Association of Marine Laboratories  
National Council for Science and the Environment (NCSE)  
National Ecological Observatory Network (NEON), Inc.  
National Ground Water Association (NGWA)  
National Postdoctoral Association  
National User Facility Organization (NUFO)  
Natural Science Collections Alliance  
New York University  
Oakland University William Beaumont School of Medicine  
Oak Ridge Associated Universities  
Population Association of America  
Purdue University  
Rensselaer Polytechnic Institute  
Research!America  
Rutgers, The State University of New Jersey  
SAMCEDA—San Mateo County Economic Development Association  
Semiconductor Industry Association (SIA)  
Semiconductor Research Corporation (SRC)  
Social and Affective Neuroscience Society  
Society for Behavioral Neuroendocrinology  
Society for Computers in Psychology  
Society for Developmental Biology  
Society of Experimental Social Psychology (SESP)  
Society for Industrial and Applied Mathematics (SIAM)  
Society for Multivariate Experimental Psychology  
Society for Neuroscience  
Society for Industrial and Organizational Psychology  
Society of Personality and Social Psychology  
Society for Psychophysiological Research  
Society for Research in Child Development  
Society for Research in Psychopathology  
Society for Text and Discourse  
Soil Science Society of America  
Southeastern Universities Research Association  
SPIE, the international society for optics and photonics  
Stanford University  
Stony Brook University  
Task Force on American Innovation  
Teratology Society  
The American Society of Bone and Mineral Research  
The Protein Society  
UNAVCO  
University Corporation for Atmospheric Research  
University of Central Florida  
University of Colorado Boulder  
University of Florida  
University of Idaho  
University of Maryland

UNM—University of New Mexico  
University of North Carolina at Chapel Hill  
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University of Rhode Island  
University of Washington  
University of Wisconsin-Madison  
Vanderbilt University  
Van Fleet & Associates  
Washington University in St. Louis  
West Virginia University  
Woods Hole Oceanographic Institution  
Yale University